

REMARKS

Applicant respectfully requests reconsideration of the application. Applicant has amended certain claims to format them as the Examiner has requested. These amendments are not related to patentability, and no change in claim scope has been made.

Applicant respectfully traverses the rejection of claims 1-2, 4, 8, 10, 12, 15-16, 19-20 and 22-23 as being unpatentable over U.S. Patent No. 5,915,027 to Cox et al. in view of U.S. Patent No. 6,064,764 to Bhaskaran et al. and U.S. Patent No. 6,363,162 to Moed et al. Applicant also traverses the rejection of claims 3, 5, 9, 13 and 17-18 as being unpatentable over Cox in view of Bhaskaran, Moed, and Austin. Finally, Applicant traverses the rejection of claims 21 and 24 as being unpatentable over Cox in view of Bhaskaran, Moed and U.S. Patent 6,243,480 to Zhao.

Bhaskaran and Moed are cited as secondary references that allegedly teach the claim elements missing from Cox. Bhaskaran provides no teaching regarding the claimed processing of digital watermarks in images acquired from print. Bhaskaran merely states that digital images transmitted or stored in a computer may be viewed by printing. This statement does not indicate that Bhaskaran's method is applicable to printed images as claimed. Bhaskaran provides no teaching regarding processing a digital watermark in an image scanned from a printed image. In fact, Bhaskaran's method clearly only applies to detecting tampering of compressed digital images.

To consider this point, one must consider how Bhaskaran's method operates to see that it is inapplicable to the claims. Bhaskaran watermarks a compressed digital image, and then detects tampering of the watermarked compressed image, with no intervening decompression-printing-scanning and compression operations. In order to print Bhaskaran's watermarked compressed image, it would have to be decompressed and then rendered for printing. Then to apply Bhaskaran's tamper detect method, the printed image would need to be scanned and compressed because Bhaskaran's method applies to compressed images. The printing process and/or the subsequent scanning of the printed image would change all of the image data in a manner that the hash value or values of the re-compressed image would be changed. These hash values are central to Bhaskaran's tamper detection scheme. See Col. 6, lines 17-67. Any change in the hash results in a conclusion that the image data has been tampered with. Thus, Bhaskaran's method would indicate that all printed images have been tampered with, which

provides no value when applied to printed images because it cannot distinguish between different levels of print quality. Because Bhaskaran's method, when hypothetically applied to printed images, would indicate that all printed images have been tampered with, it cannot provide the measure of print quality as claimed. The Examiner's position that determination of the level of tampering would also demonstrate the quality of the printing of the image is, therefore, incorrect.

Moed's teachings do not suggest any of the claim elements that are missing from Cox and Bhaskaran. Thus, the combined teachings of the references fail to teach all of the elements of the claim. Moreover, Moed does not provide any suggestion on how to modify Cox or Bhaskaran in a manner that would even remotely suggest the claim elements.

Applicant has filed a notice of appeal with this response. To avoid the necessity of an appeal, Applicant requests the Examiner to withdraw the rejection and allow the claims.

Date: September 29, 2005

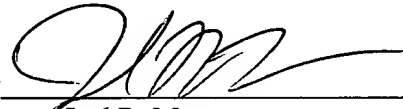
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Respectfully submitted,

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